

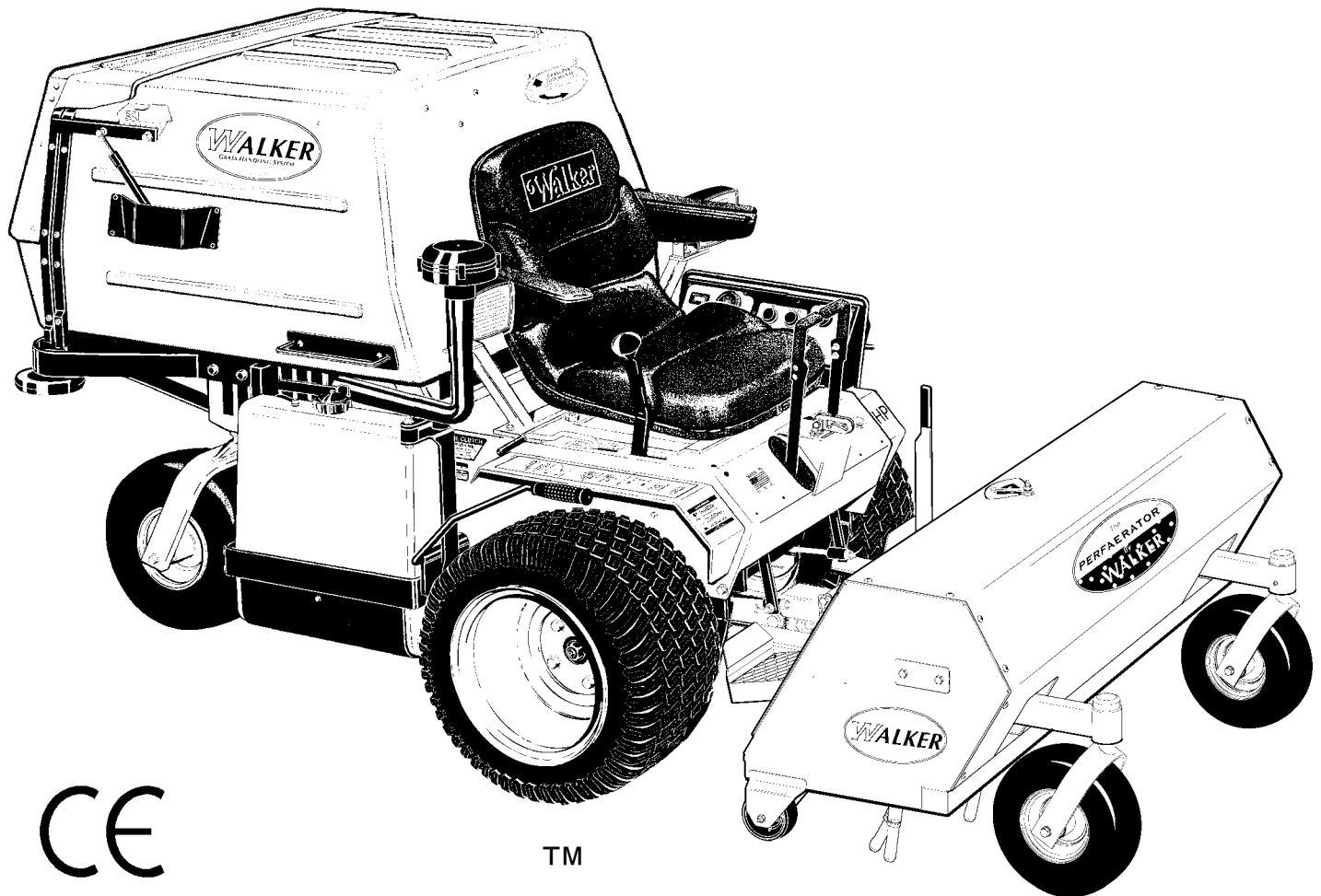
Walker Rider Lawnmowers

OWNER'S MANUAL

Safety, Assembly, Operating, and Maintenance Instructions

and ILLUSTRATED PARTS MANUAL

PA6685 PERFAERATOR™ Attachment



CE

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Please Read and Save These Instructions

For Safety, Read All Safety and Operation
Instructions Prior to Operating Machine

Effective Date: 02-01-05

P/N 6600-1



Foreword

Thank you. . .for purchasing a Walker *PERFAERATOR*[™]. Every effort has been made to provide you with the most reliable product on the market, and we are sure you will be among our many satisfied customers. If for any reason this product does not perform to your expectations, please contact us at (970) 221-5614. Every customer is important to us. Your satisfaction is our goal.

Please. . .read this manual thoroughly! This manual is to be used in conjunction with the mower owner's manual and the engine manufacturer's manual for the specific engine on the mower model you are using. Before you operate your new implement, please read this entire manual. Some of the information is crucial for proper operation and maintenance of this product - it will help protect your investment and ensure that the implement performs to your satisfaction. Some of the information is important to your safety and must be read and understood to help prevent possible injury to the operator or others. If anything in this manual is confusing or hard to understand, please call our service department, at (970) 221-5614, for clarification before operating or servicing this product.

This manual covers the Model PA6685 *PERFAERATOR*[™] attachment.

All shields and guards must be in place for the proper and safe operation of this aerator. Where they are shown removed in this manual, it is for illustration purposes only. **Do not operate this product unless all shields and guards are in place.**

Specifications given are based on the latest information available at the time this manual was produced.

Walker Mfg. Co. is continually striving to improve the design and performance of its products. We reserve the right to make changes in specifications and design without thereby incurring any obligation relative to previously manufactured products.

Sincerely,
WALKER MANUFACTURING COMPANY

A handwritten signature in cursive script that reads "Bob Walker".

Bob Walker, President

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General Information

HIGHLIGHTED INFORMATION

Walker Manufacturing recommends that any service requiring special training or tools be performed by an authorized Walker Mower Dealer. There are several general practices to be aware of in the area of safety. Most accidents associated with the operation or maintenance of a Walker product are caused by disregarding basic safety precautions or specific warnings. Such accidents, in most cases, can be prevented by being aware of the dangers present.

Information of special importance has been highlighted in bold type in this manual. Refer to **Safety Instructions** for the meanings of **DANGER**, **WARNING**, **CAUTION**, **IMPORTANT**, and **NOTE**.

GLOSSARY

There are many terms that are either unique to this equipment or that are used as acronyms. The following terms and their definitions will help while using this manual:

- **FORWARD SPEED CONTROL (FSC)** controls the maximum forward speed of the tractor; functioning as a cruise control.
- **LEFT HAND (LH)** refers to the left-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **MACHINE** consists of the implement installed on the tractor, functioning as a single unit.
- **POWER TAKE-OFF (PTO)** transmits engine power to run the PERFAERATOR™.
- **RIGHT HAND (RH)** refers to the right-hand side of the machine when the operator is seated facing forward in the tractor seat.
- **TRACTOR** is the prime mover, including the engine, drivetrain, operator seat, and controls to operate the implement.

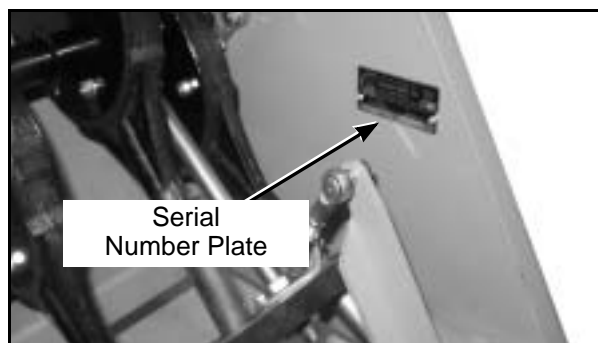
IDENTIFYING NUMBER LOCATIONS

The PERFAERATOR™ serial number is affixed to RH side of the inside of the unit housing. Model and serial numbers are helpful when obtaining replacement parts and maintenance assistance. For ready reference, please record these numbers in the space provided.

PERFAERATOR™ Model No. PA6685

PERFAERATOR™ Serial No. _____

Fill In By Purchaser



Aerator Serial Number Location

SERVICING OF DRIVETRAIN GEARBOX

Detailed servicing and repair of the gearbox used on the PERFAERATOR™ is not covered in this manual. Only routine maintenance and general service instructions are provided. For the service of the gearbox during the limited warranty period, it is important to find a local, authorized servicing agent of the component manufacturer. Any unauthorized work done on these components during the warranty period **may void the warranty**. If you have any difficulty finding an authorized outlet or obtaining warranty service, please contact our Service Department for assistance:

Walker Manufacturing Company
5925 E. Harmony Road
Fort Collins, CO 80528
1-970-221-5614

Gearbox manufacturer's information is:

Bondioli & Pavesi
10252 Sycamore Drive
Ashland, VA 23005-8137
804-550-2224

Specifications

MODEL

PA6685 AERATOR

PERFORMANCE

Aeration Width	41-1/2 in. (105 cm)
Core Spacing	3.63 x 6 in. (9.22 x 15.25 cm)*
Coverage per Hour	60,000 sq. ft. (5574 sq. meters)
Coring Depth	Up to 2.50 in. (6.35 cm)

DIMENSIONS

Weight	365 lb (136 kg)
Height	23-1/4 in. (59 cm)
Width	48-5/8 in. (123 cm)
Length	42-3/4 in. (109 cm)

CONSTRUCTION

Frame	All Welded Unitized Frame
Housing	11 & 14 Gauge Welded Steel
Number of Tines	12
Tine Construction	Machined, High Carbon, Heat-Treated Steel work in Line as a Camshaft

DRIVE SYSTEM

PTO Drive	Tractor PTO Drive Shaft/2 High-Speed U-Joints, Right Angle Gearbox Drives Chain to Camshaft
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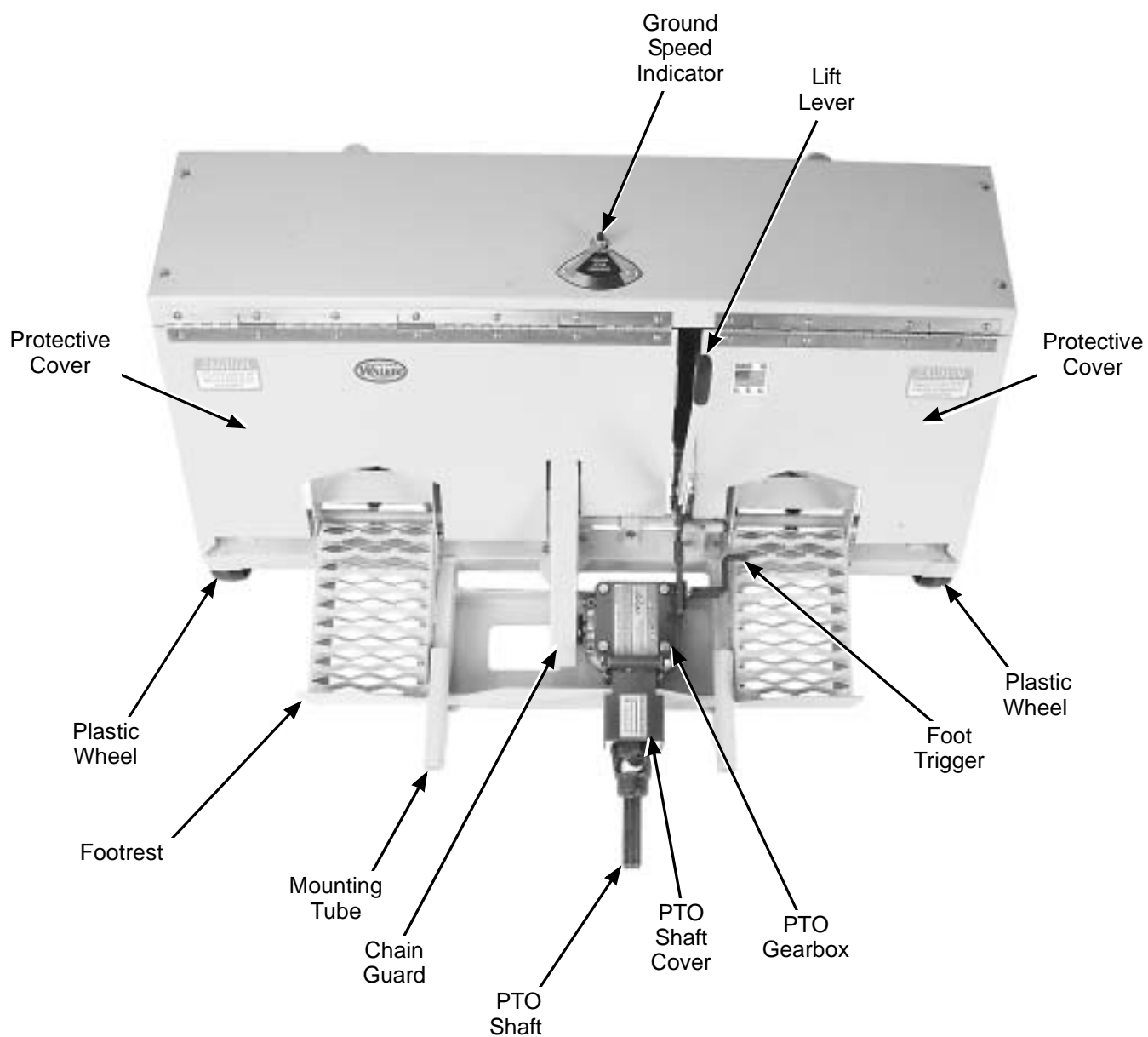
TIRE/WHEEL SIZE

Deck Caster Wheel	Pneumatic 11 x 4.00-5
Roller Wheel	3-7/8 in. (9.84 cm)

* This measurement may vary depending on ground speed

Component Identification


NOTE: Control Identification shown in **Operating Instructions** section.



PERFAERATOR™ Top View (Not Installed)

Safety Instructions

Pay particular attention to any information labeled **DANGER**, **WARNING**, **CAUTION**, **IMPORTANT**, and **NOTE** in this manual.

When you see the Safety Alert Symbol (), read, understand, and follow the instructions. Failure to comply with safety instructions may result in personal injury.

The seriousness or degree of importance of each type of information is defined as follows:



DANGER

An **IMMEDIATE** hazard that **WILL** result in severe personal injury or **DEATH**, if warning is ignored and proper safety precautions are not taken.



WARNING

A **POTENTIAL** hazard that **COULD** result in severe personal injury or **DEATH**, if warning is ignored and proper safety precautions are not taken.



CAUTION

Possible hazards or unsafe practices that **MAY** result in **MODERATE** personal injury or property damage, or machine damage, if warning is ignored and proper safety precautions are not taken.

IMPORTANT: Identifies mechanical information demanding special attention, since it deals with the possibility of damaging a part or parts of the machine.

NOTE: Identifies information worthy of special attention.

Walker Manufacturing cannot predict every potentially dangerous situation. Therefore, items labeled as such in this manual do not cover all conceivable situations. Any person using procedures, tools, or control techniques not recommended by Walker Manufacturing must take full responsibility for safety.

The *PERFAERATOR*™ has been designed with many safety features to protect the operator from personal harm or injury. However, it is necessary for the operator to use safe operating procedures at all times. **Failure to follow safety instructions contained in this manual may result in personal injury or damage to equipment or property.**

If you have any questions concerning setup, operation, maintenance, or safety, please contact your authorized Walker Mower Dealer or call Walker Manufacturing Company at (970) 221-5614.

BEFORE OPERATING

1. **Read and understand the contents of this OWNER'S MANUAL before operating the machine.** Become thoroughly familiar with all controls and how to stop the machine and disengage the controls quickly. Replacement Owner's Manuals are available by sending the Model and Serial Number to:

Walker Manufacturing Company
5925 East Harmony Road
Fort Collins, CO 80528

2. **Never allow children to operate or give rides on the machine.** Do not allow adults to operate without proper instruction.
3. Do not allow anyone other than the operator on the machine.
4. Keep everyone, especially children and pets, a safe distance away from the area being aerated. **Do not operate with bystanders in the area.**
5. Do not operate the machine wearing sneakers, tennis shoes, or similar lightweight footwear. **Wear substantial protective footwear that will improve footing on slippery surfaces.**
6. Ground cover or leaves can sometimes hide objects that might cause damage to the aerator. Clear the area of objects and mark all sprinkler heads and/or utility box covers.

Safety Instructions

7. Do not wear loose fitting clothing that could get caught in moving parts. **Always wear adequate protective clothing** including long pants. Wearing safety glasses, safety shoes, and a helmet is advisable and required by some local ordinances and insurance regulations.
8. Prolonged exposure to loud noise can cause impairment or loss of hearing. **Operator hearing protection is recommended.** Wear a suitable hearing protective device, such as earmuffs or earplugs.
9. **Keep all protective shields and safety devices in place.** If a protective shield, safety device, or decal is damaged, unusable, or missing, repair or replace it before operating the machine.
10. **Be sure any interlock switches are functioning correctly** so the engine cannot be started unless the Forward Speed Control lever is in the **NEUTRAL** position and the PTO clutch is in the **DISENGAGED** position. Also, the engine should stop if the operator lifts off the seat with the PTO clutch in the **ENGAGED** position.
11. **Never attempt to make any adjustments while the engine is running**, except where specifically instructed to do so.
12. **Handle gasoline or diesel fuel with care.** Gasoline is highly flammable and its vapors are explosive:
 - a. Use an approved fuel container.
 - b. Never add fuel to a running engine or hot engine (allow hot engine to cool several minutes).
 - c. Keep matches, cigarettes, cigars, pipes, open flames, or sparks away from the fuel tank and fuel container.
 - d. Always fill the fuel tank outdoors using care. Fill to about one inch from the top of the tank. Use a funnel or spout to prevent spilling.
 - e. Replace the machine fuel cap and container cap securely and clean up any spilled fuel before starting the engine.

OPERATING

NOTE: Refer to the **Walker Rider Lawnmowers OWNER'S MANUAL** for safety instructions for operating the tractor.

1. Operate the machine only in daylight or in good artificial light with good visibility of areas being aerated.
2. Sit on the seat when starting the engine and operating the machine. Keep feet on footrests at all times when the tractor is moving and/or the implement is operating.
3. An inexperienced operator should **learn to steer (maneuver) the tractor with a slow engine speed before attempting any operating.** Be aware that, with the front mounted implement configuration, the back of the machine swings to the outside during turns.
4. Remember, for an emergency stop, the forward motion of the tractor can always be stopped by pulling the Forward Speed Control (FSC) into the **NEUTRAL-PARK** position.
5. Disengage the PTO clutch and put the FSC in the **NEUTRAL-PARK** position before starting the engine (an ignition interlock switch normally prevents starting of the tractor if these controls are in the **OPERATING** position).
6. **Do not run the engine in a confined area without adequate ventilation.** Exhaust fumes are hazardous and can be deadly.
7. **Do not carry passengers** - maximum seating capacity is one (1) person.
8. Make sure the tines are clear of debris before engaging the PTO clutch.
9. Be careful never to allow anyone in front of the implement.
10. Clear area of loose objects and all children. Flag sprinkler heads and other hidden obstacles. Walk the entire area before aerating for possible holes.
9. **Avoid sudden starts or stops.** Before backing the machine up, disengage the PTO, retract tines and look to the rear to be sure no one is behind the machine. Watch carefully for traffic when crossing or working near roadways.

Safety Instructions

12. Disengage the PTO clutch when transporting the machine.
13. Do not operate across the face of slopes. Use extreme caution when changing direction on slopes.
14. **Never adjust tine depth with the engine running.** Before adjusting tines or servicing, disengage the PTO clutch, stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

NOTE: The PTO brake should normally stop drive line rotation within 5 seconds of disengaging the PTO clutch.

15. Do not operate the aerator with the covers open.
16. If the aerator tines do not move when the PTO is engaged:
 - a. Disengage the PTO clutch, stop the engine, and remove the ignition key before leaving the seat.
 - b. **LOOK** to make sure PTO shaft and the tine movement has stopped before servicing any area of the machine.
 - c. Disconnect the fuel solenoid wire [diesel engines] or spark plug wire(s) [gasoline engines].
17. If the implement strikes a solid object or the machine begins to vibrate abnormally, **immediately disengage the PTO clutch, stop the engine, and wait for all moving parts to stop.** Disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines] to prevent accidental starting. Thoroughly inspect the implement and repair any damage before restarting the engine and operating the machine. Make sure implement components are in good condition and all bolts are tight.
18. **Do not touch the engine or muffler while the engine is running** or immediately after stopping the engine. These areas may be hot enough to cause serious burns.
19. When leaving the machine unattended, disengage the PTO clutch, stop the engine, and remove the ignition key.

MAINTENANCE

NOTE: Refer to the **Walker Rider Lawnmowers OWNER'S MANUAL** for proper tractor maintenance procedures.

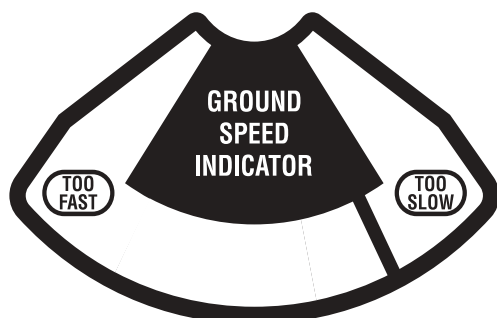
1. **To prevent accidental starting of the engine** when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].
2. **To reduce fire hazards**, keep the engine free of grass, leaves, excessive grease, and dirt.
3. Keep all nuts, bolts, and screws tight **to ensure the machine is in a safe, working condition.**
4. **Perform only maintenance instructions described in this manual.** Unauthorized maintenance operations or machine modifications may result in unsafe operating conditions.
5. If the engine must be running to perform a maintenance adjustment, **keep hands, feet, and clothing away from moving parts. Do not wear jewelry or loose clothing.**
6. **Always use proper engine service manuals when working on the engine.** Unauthorized maintenance operations or modifications to the engine may result in unsafe operating conditions.
7. Altering the machine in any manner which adversely affects its operation, performance, durability, or use will **VOID the warranty** and may cause hazardous conditions.
8. Never attempt to disconnect any safety devices or defeat the purpose of these safety devices.
9. Do not change the engine governor settings or overspeed the engine. The governor has been factory-set for maximum-safe engine operating speed.
10. **Use genuine factory replacement parts.** Substitute parts may result in product malfunction and possible injury to the operator and/or others.

IMPORTANT: Keep all applicable manuals immediately accessible to anyone who may operate or service this machine.

Safety Instructions

SAFETY, CONTROL, AND INSTRUCTION DECALS

Safety, Control, and Instruction Decals are installed on the machine; if any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation. The Decal Part Number is listed below and in the Parts Manual; the Decal Location is shown in the Parts Manual.



Speed Indicator (Walker P/N 6681-13)



Door Cover (Walker P/N 6682-9)



PTO Shield (Walker P/N 7822)

OPERATING INSTRUCTIONS

START

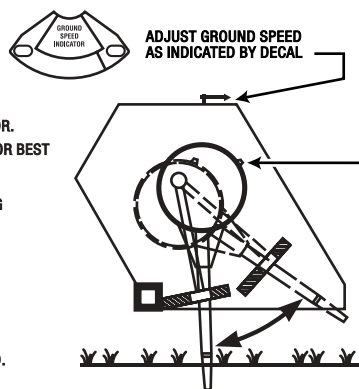
1. RELEASE THE TINES INTO THE OPERATING POSITION BY DEPRESSING THE FOOT TRIGGER AND USING THE LIFT LEVER TO LOWER THE TINES.
2. SET THE ENGINE AT FULL THROTTLE.
3. BEGIN DRIVING THE TRACTOR FORWARD SLOWLY.
4. PULL THE PTO CLUTCH LEVER UP TO ENGAGE THE AERATOR.
5. ADJUST GROUND SPEED TO PROPERLY POSITION TINES FOR BEST PERFORMANCE AND SERVICE.

- IF GROUND SPEED IS **TOO FAST**, THE RETRACTOR PLATES WILL SWING AWAY FROM THE FRONT, CAUSING A SHALLOW PLUGGED HOLE.
- IF GROUND SPEED IS **TOO SLOW**, THE RETRACTOR PLATES WILL SWING FORWARD AND MAKE CONSTANT CONTACT WITH THE FRONT FRAME, RESULTING IN EXCESSIVE WEAR OF TINES AND RETRACTOR PLATES.

STOP (OR BACK-UP)

1. DISENGAGE PTO CLUTCH LEVER WHILE MOVING FORWARD.
2. BRING THE TRACTOR TO A COMPLETE STOP.
3. PULL BACK ON THE LIFT LEVER TO LOCK THE TINES INTO THE RETRACTED POSITION.

NOTE: MOMENTARILY DISENGAGING THE PTO WILL ALLOW THE TINES TO "FLOAT" OVER OBJECTS (SPRINKLER HEADS, SIDEWALKS, ETC.) IN THE AERATING PATH WITH THE TRACTOR MOVING FORWARD.



NOTE: LUBRICATE GREASE FITTING ON CAM RINGS (12 FITTINGS) EVERY 4 HOURS

CAUTION

- DO NOT ENGAGE PTO CLUTCH LEVER UNTIL TINES ARE RELEASED AND TRACTOR IS MOVING FORWARD.
- DO NOT STOP TRACTOR WITH PTO CLUTCH LEVER ENGAGED.
- DO NOT BACK-UP TRACTOR WITH TINES IN OPERATING POSITION.
- DO NOT ATTEMPT TO LIFT TINES INTO RETRACTED POSITION WHILE OPERATING UNIT.

6682-14

Operator Decal (Walker P/N 6682-14)

Assembly Instructions

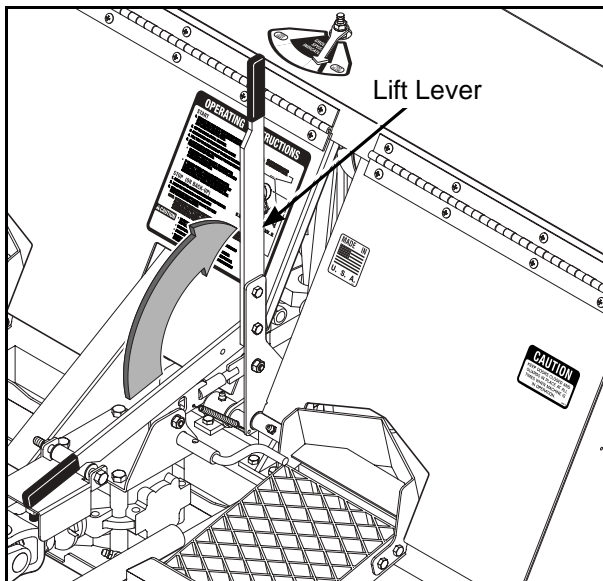
SETUP INSTRUCTIONS

The *PERFAERATOR*™ is shipped partially assembled. After uncrating, initial setup is required.

NOTE: During the process of unpacking, any damaged or missing parts should be noted and reported to the delivering carrier immediately (put in writing within 15 days). The carrier will provide directions for proceeding with a claim to receive compensation for damage.

Lift Lever Installation

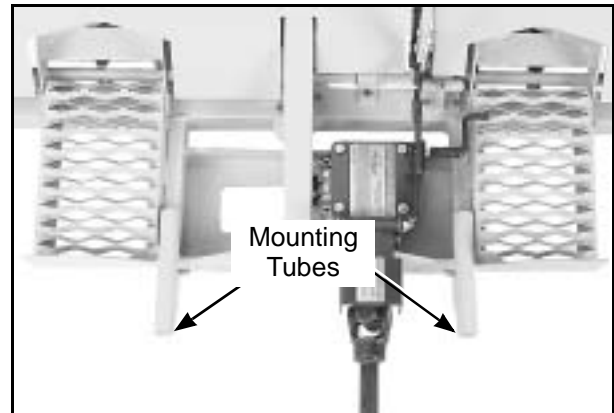
The lift lever for the camshaft assembly position is partially assembled. Stand the lift lever upright and attach the remaining hardware.



Install Lift Lever Handle
(stand upright and insert hardware)

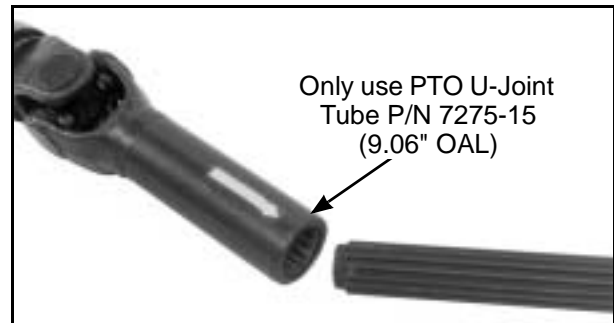
Installation on Tractor

1. Remove the mower deck from the tractor if necessary. Refer to the appropriate Tractor Owner's Manual.
2. Lightly grease each tractor support arm (2) on the tractor.



Attach Aerator to Tractor

3. Engage the aerator frame tube sockets on the tractor support arms. Slide the implement hitch onto the support arms approximately 3 in. (76 mm).



Connect Driveline Coupler to Tractor PTO

4. Connect the aerator driveline to the tractor PTO shaft by sliding back the locking collar on the yoke, then push the yoke over the PTO shaft until the locking collar **snaps back fully**. Make sure the driveline is well secured at both ends.

DANGER

This shaft turns at very high RPM. If the collar is not locked to the PTO shaft at the tractor end, or if the yoke at the aerator end is not secured properly, the driveline can fly loose with great force capable of causing serious injury or death.

5. Install the hitch pin through the hole on the end of each support arm to lock the hitch in place. Two (2) hitch pins are included in the owner's packet of materials.

Operating Instructions

CONTROL IDENTIFICATION, LOCATION, AND FUNCTION



CAUTION

Before operating the aerator, become familiar with the location and function of all operator controls. Knowing the location, function, and operation of these controls is important for safe and efficient operation of the aerator.

Tractor Controls

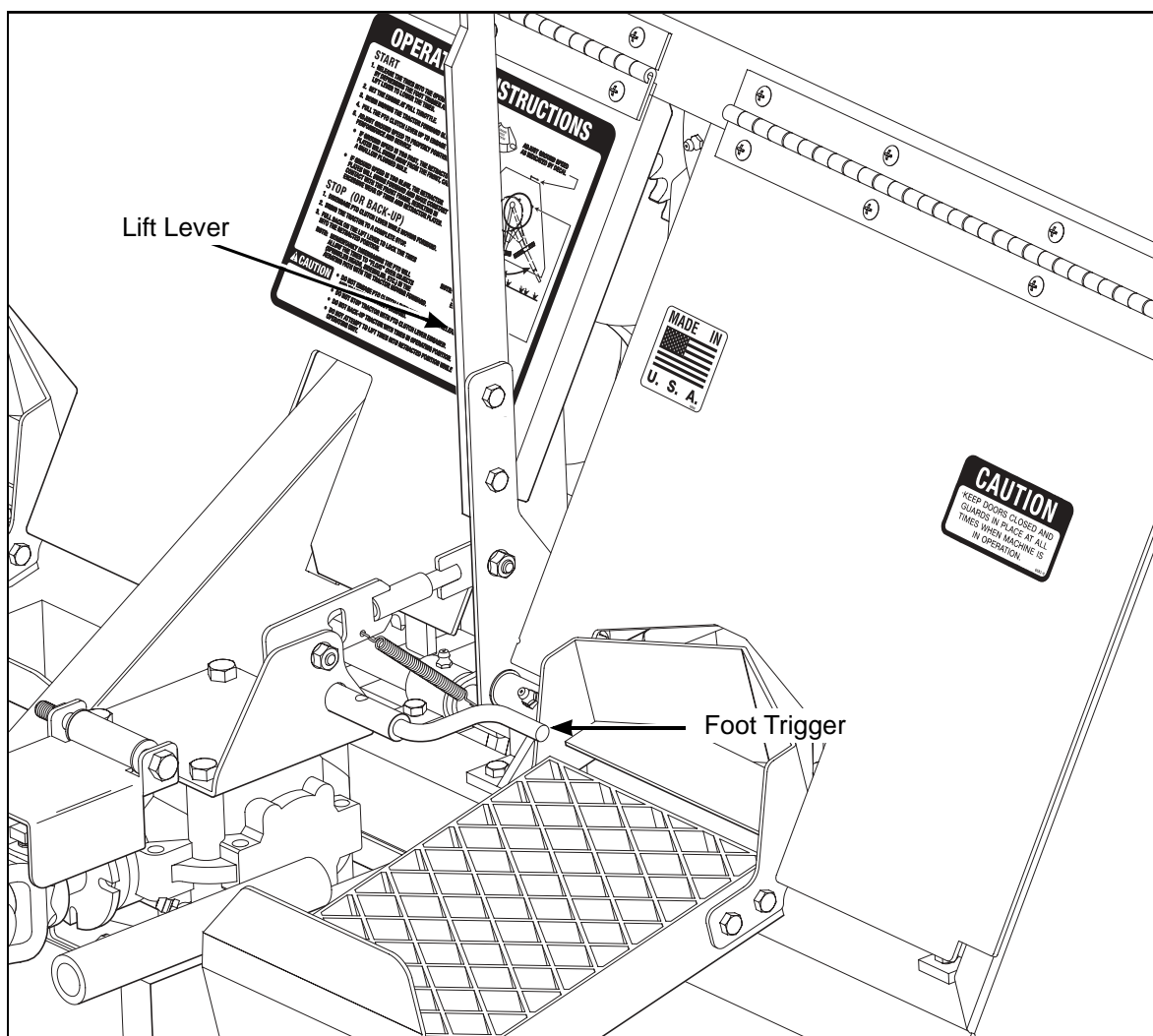
Refer to the appropriate Tractor Owner's Manual for complete information about tractor operating controls.

Lift Lever

The lift lever is located to the right of the operator up from the right footrest. The lever is used to raise and lower the camshaft assembly. Moving the lift handle **forward lowers** the aerator drive assembly; moving it **backward raises** the aerator drive assembly.

Foot Trigger

The foot trigger is located on the right footrest. The foot trigger and the lift lever are used together to raise and lower the aerator drive assembly. Pull the handle back, **press the foot trigger, and hold on to the lift handle while letting it move forward to lower** the aerator drive assembly.



Operating Controls

Operating Instructions

STARTING THE MACHINE



ALWAYS disengage the PTO clutch and put the FSC in the NEUTRAL-PARK position before starting the engine.

Refer to the appropriate Tractor Owner's Manual for tractor starting and operating procedures.

ENGAGING THE AERATOR

Refer to the appropriate Tractor Owner's Manual for tractor starting and operating procedures.

1. Release the tines into the operating position by pushing on the foot trigger and using the lift lever to lower the tines.
2. Set the engine throttle at full speed.
3. Begin driving the tractor forward slowly.
4. Pull the PTO clutch lever UP to engage the aerator.



A safety interlock switch (seat switch) will cause the engine to stop if the PTO clutch is engaged and the operator is not in the seat. The function of this switch should be checked by the operator raising off the seat and engaging the PTO clutch; the engine should stop. If the switch is not working, it should be repaired or replaced before operating the aerator. **DO NOT** disconnect the safety switches; they are for the operator's protection.

IMPORTANT: **DO NOT** engage the PTO clutch when transporting the machine. **DO NOT** engage the PTO clutch with the PTO shaft disconnected (the aerator removed from the tractor).

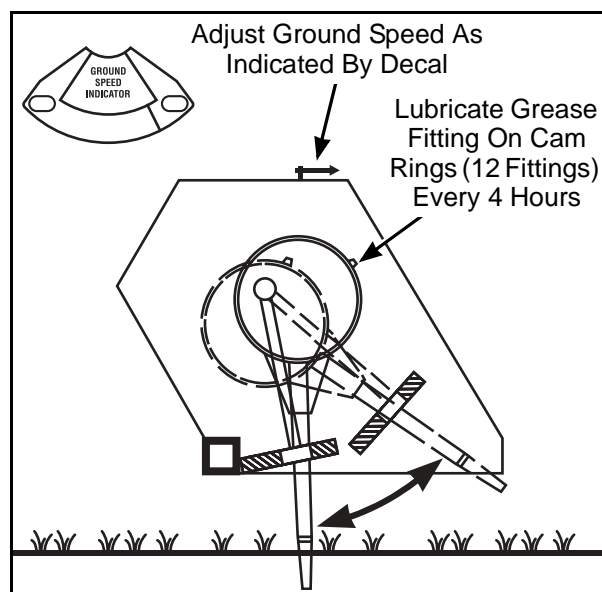
Normal Operation

IMPORTANT: The aerator has a natural driving motion when engaged, so the speed of the tractor is critical to ensure proper aeration and longevity of aerator components.

1. Adjust ground speed to properly position tines as shown.

IMPORTANT: If ground speed is **too fast**, the retractor plates will swing away from the front, causing a shallow plugged hole.

IMPORTANT: If ground speed is **too slow**, the retractor plates will swing forward and make constant contact with the front frame, resulting in excessive wear of tines and retractor plates.



2. If an obstacle is encountered during operation (sprinkler head, sidewalk, etc.), the PTO can be disengaged and reengaged after passing obstacle.

IMPORTANT: Minimum turning radius is 10 feet (3.05 m). Turning too tight can result in damage to the turf and the aerator.

RECOMMENDATIONS FOR AERATING

For best results the ground must have a sufficient amount of moisture to allow the tines maximum penetration.

IMPORTANT: Operate the engine at **full speed** when operating the aerator, to allow the engine to produce full horsepower and to increase efficiency of the engine cooling system.

- Do not drive the mower backwards with the aerator in the down position--it may cause severe turf damage.
- Driving the tractor too slow may cause turf damage.

Operating Instructions

- Driving the tractor too fast will make aeration holes appear less frequently and too shallow (short plugs) may do a less than desirable job.
- Do not engage the PTO with the drive assembly in the transport position.

STOPPING THE MACHINE

1. Disengage the PTO clutch.
2. Pull the steering levers to the **NEUTRAL** position and then move the FSC lever backward to the **NEUTRAL-PARK** position.
3. Slow the engine to idle; put the throttle in the **IDLE** position.
4. Retract the tines into the transport position using the lift lever.



WARNING

A brake stops the machine from free-wheeling within five (5) seconds after disengaging the PTO clutch. If the brake system malfunctions and the machine does not stop within five (5) seconds, the brake should be adjusted or repaired before operating the machine. Refer to the appropriate Tractor Owner's Manual for adjustment procedures.

4. Turn the ignition switch **OFF**.



WARNING

Remove the key from the ignition switch when leaving the machine unattended. This will prevent children and inexperienced operators from starting the engine.

5. Engage the parking brake.

IMPORTANT: The hydrostatic transmissions lock to prevent the machine from rolling freely with the engine stopped. However, if the machine is parked on a slope, it is necessary to **ENGAGE** the parking **BRAKE** to prevent the machine from creeping. This is due to a small amount of slippage in the hydrostatic transmissions, especially when transmission fluid is warm.

Maintenance Instructions

LUBRICATION



WARNING

DO NOT attempt to lubricate the machine with the tractor engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key.

Grease Fitting and Oil Point Lubrication

Lubricate the grease fittings and oil points **after every 8 hours** of operation (or as recommended below). Use SAE general purpose lithium or molybdenum base grease for grease fittings and light machine oil (SAE 10) to lubricate oil points.

Gearbox

The gearbox is permanently lubricated (oil filled) and sealed requiring no scheduled lubrication. However, the gearbox oil seal(s) should be checked **every 25 hours** for indication of an oil leak. If gearbox oil is changed, fill with 15 oz. of 80W-90 gear oil. **Do not overfill.**

Drive Chain

Lubricate the drive chain **every 8 hours**. A light penetrating oil or special purpose chain oil is recommended. Lubricate the drive chain as follows:

1. Remove the three (3) screws fastening the removable chain guard cover to the frame.



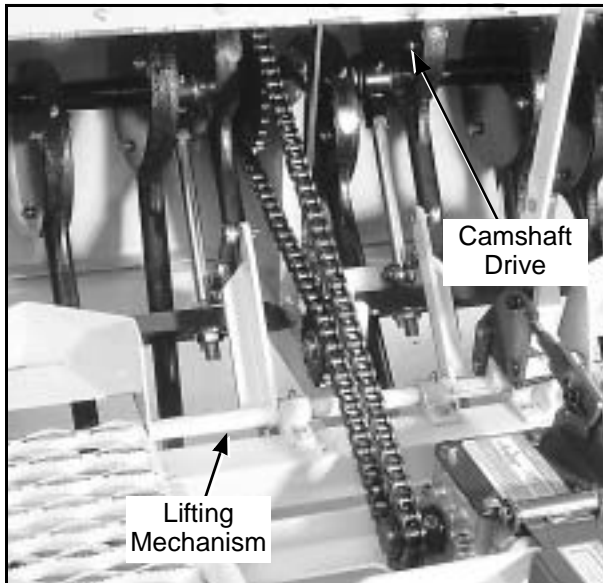
Remove Chain Guard Cover

Maintenance Instructions

2. Apply oil to the drive chain.
3. Adjust the chain if necessary. Refer to **ADJUSTMENTS** of **Drive Chain Tension** in this section.
4. Reinstall chain guard cover by reversing the removal procedure.

Lifting Mechanism

Lubricate the grease fittings (4) across the lifting mechanism attached to the frame **every 25 hours**. Use SAE general purpose lithium or molybdenum base grease.



Lubricating Lift Mechanism and Camshaft Drive

Camshaft Drive System

Lubricate the grease fittings (16) on the camshaft drive system **every 4 hours**. Use Almagard® #3752 lubricant (Walker P/N 6685-7). The bearings at each end and attached to the retractor plate arms are sealed and should be greased **every 100 hours** of operation.

PTO U-Joint

Lubricate the grease fitting for the PTO U-Joint **every 8 hours** with SAE general purpose lithium or molybdenum base grease.

The PTO U-Joint is accessed by removing the gear-box cover.

ADJUSTMENTS



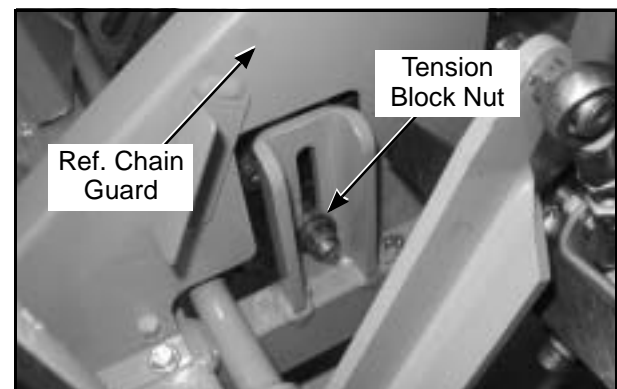
WARNING

DO NOT attempt to make any adjustments with the tractor engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

Drive Chain Tension

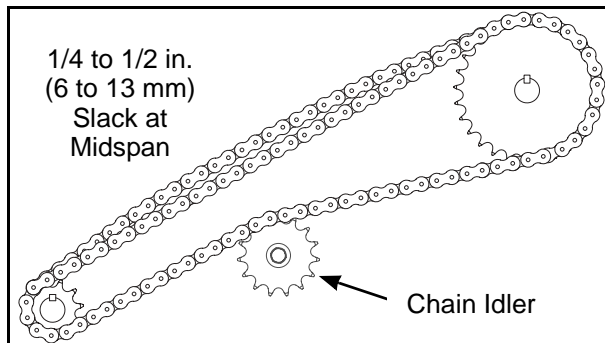
The drive chain should have 1/4 to 1/2 in. (6 to 13 mm) of slack at midspan. Remove the chain guard cover to check slack. Adjust the drive chain as follows:

1. Remove the three (3) screws fastening the removable chain guard cover to the frame.
2. Loosen the chain tension block mounting nut and bolt (see photo below).
3. Position the chain tension block so the chain has 1/4 to 1/2 in. (6 to 13 mm) of slack.
4. Retighten the chain tension block mounting nut and bolt.
5. Recheck the drive chain tension.



Drive Chain Adjustment

Maintenance Instructions



Proper Drive Chain Tension

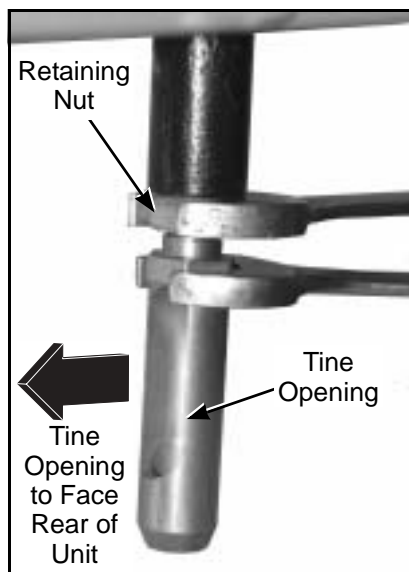
Tine Ends

Tine ends are adjustable by using the following procedure:

1. Loosen the retaining nut on the tine thread and unscrew tine end to achieve the desired depth. Open side of tine should be to rear.

IMPORTANT: Do not unscrew the tine ends too far. The maximum aerating depth is 2-1/2 in. (6.35 cm).

2. Tighten retaining nut.



Tine End Depth Adjustment

REPLACING/REPAIRING



CAUTION

ALWAYS use genuine factory replacement parts. Substitute parts **CAN** result in product malfunction and possible injury to the operator and/or others.



WARNING

DO NOT attempt to make any replacements or repairs with the tractor engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

Tine Ends

Tine ends are replaceable by using the following procedure:

1. Loosen the retaining nut on the tine thread and unscrew tine end.
2. Install new tine end by reversing the removal procedure. Open side of tine should be to rear.

REMOVAL

1. Park the tractor on a level surface with the tines in the up position.



WARNING

DO NOT attempt to remove the aerator from the tractor with the engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

2. Remove the hitch pins from the ends of the support arms.
3. Slide the PTO shaft out of the PTO coupler while sliding the aerator off the tractor support arms.

END OF SEASON STORAGE

1. Clean the aerator thoroughly.
2. Repainting all parts where paint has worn.

NOTE: Rustproofing or painting **every year** will prolong the life of the aerator components and moving parts.

3. When the aerator is dry, lubricate all moving parts. Apply lubricant liberally to all surfaces to protect against rust.
4. Store the aerator in a dry place.

MAINTENANCE AND SERVICE RECORD SHEET

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LUBRICATION POINTS

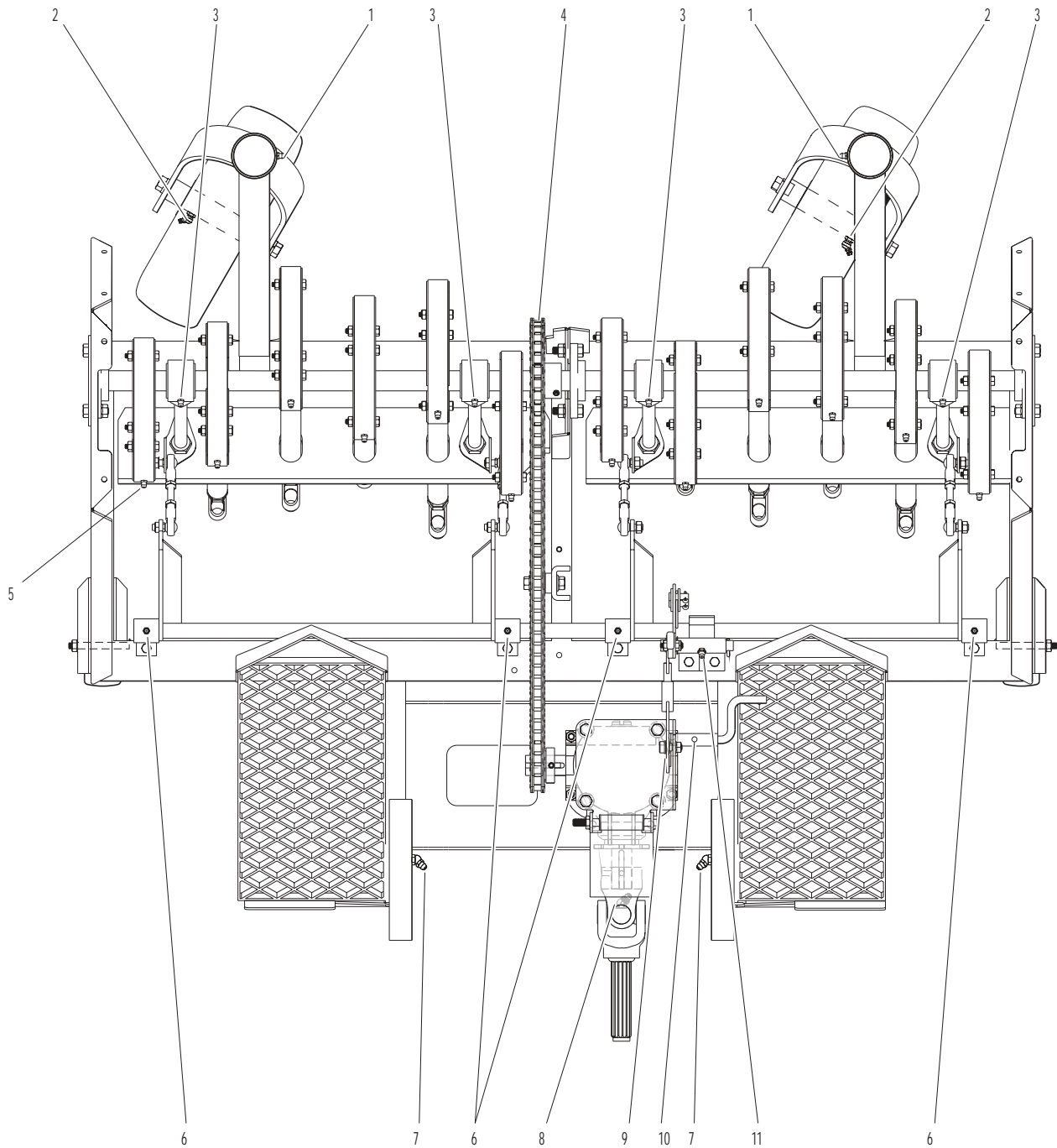
ITEM NO.	LOCATION	LOCATION TYPE	NO. PLACES	ITEM NO.	LOCATION	LOCATION TYPE	NO. PLACES
Lubrication Points				6	Actuator Rod Pivots	Grease	4
1	Deck Caster Wheel Fork Pivot	Grease	2	7	Deck Support Arm Socket	Grease	2
2	Deck Caster Wheel Bearing	Grease	2	8	Universal Joint Shaft Assembly	Grease*	1
3	Rod Bearing Bushing	Grease	4	9	Actuator Link Latch	Oil	1
4	Drive Chain	Oil*	1	10	Foot Trigger Pivot	Oil	1
5	Eccentric Assembly Tine	Grease**	12	11	Engage Lever Pivot	Grease	1

* Grease every eight (8) hours.

** Grease every eight (8) hours using Almagard #3752 lubricant (Walker P/N 6685-7).

NOTE: The gearbox is permanently lubricated (oil filled) and sealed requiring no scheduled lubrication. However, the gearbox oil seal(s) should be checked **every 25 hours** for indication of an oil leak.

LUBRICATION POINTS



BODY AND FRAME COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
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Body And Frame Components

1	6682-3	Front Cover (Includes Item # 11)	1
2	6681-10	Rear Cover, RH (Includes Items # 3, 4, 5, 7 & 17)	1
3	6682-9	Decal, Perfaerator Cover	2
4	7504-4	Hinge (15-1/2")	1
5	5856	Decal, Made In USA	1
6	6681-13	Decal, Ground Speed Indicator	1
7	6682-14	Decal, Perfaerator Oper.	1
8	7504-3	Hinge (27")	1
9	5803	Decal, Walker Mfg. Logo	1
10	6681-11	Rear Cover, LH (Includes Items # 3, 7, 8, 9 & 17)	1
11	6682-2	Decal, Perfaerator Oval	1
12	5103-4	Pivot Bushing (3/8 ID)	2
13	6683-1	Shaft Guard (Includes Items # 12 & 14)	1
14	8746	Decal, U-Joint Tube	1
15	6684-9	Transport Latch Release (Includes Item # 16)	1
16	7822	Decal, PTO Shield/Danger	1
17	8790	Rubber Cushion Strip	4
18	6681-6	Chain Guard	1
19	6683-5	Toe Guard, Bolt On	2
20	5830-3	Grease Fitting (45 Deg.)	4
21	6682	Aerator Carrier Frame (Includes Item # 24)	1
22	6715	Roller Wheel (3-7/8)	2
23	6682-13	Axle Spacer	2
24	5800	Decal, Walker Mower	2
25	5830	Grease Fitting	2

Ground Speed Indicator Components

26	6681-14	Arrow, Ground Speed Indicator	1
27	6681-22	Spacer Tube (1-7/8)	1
28	6681-16	Bushing (5/16 x 3/8 x 3/4)	3
29	6681-20	Actuator Rod Mount	1
30	6681-17	Torsion Spring (.375 x .375)	1
31	6681-21	Spacer (.475)	1
32	6681-19	Ground Speed Indicator Rod	1

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
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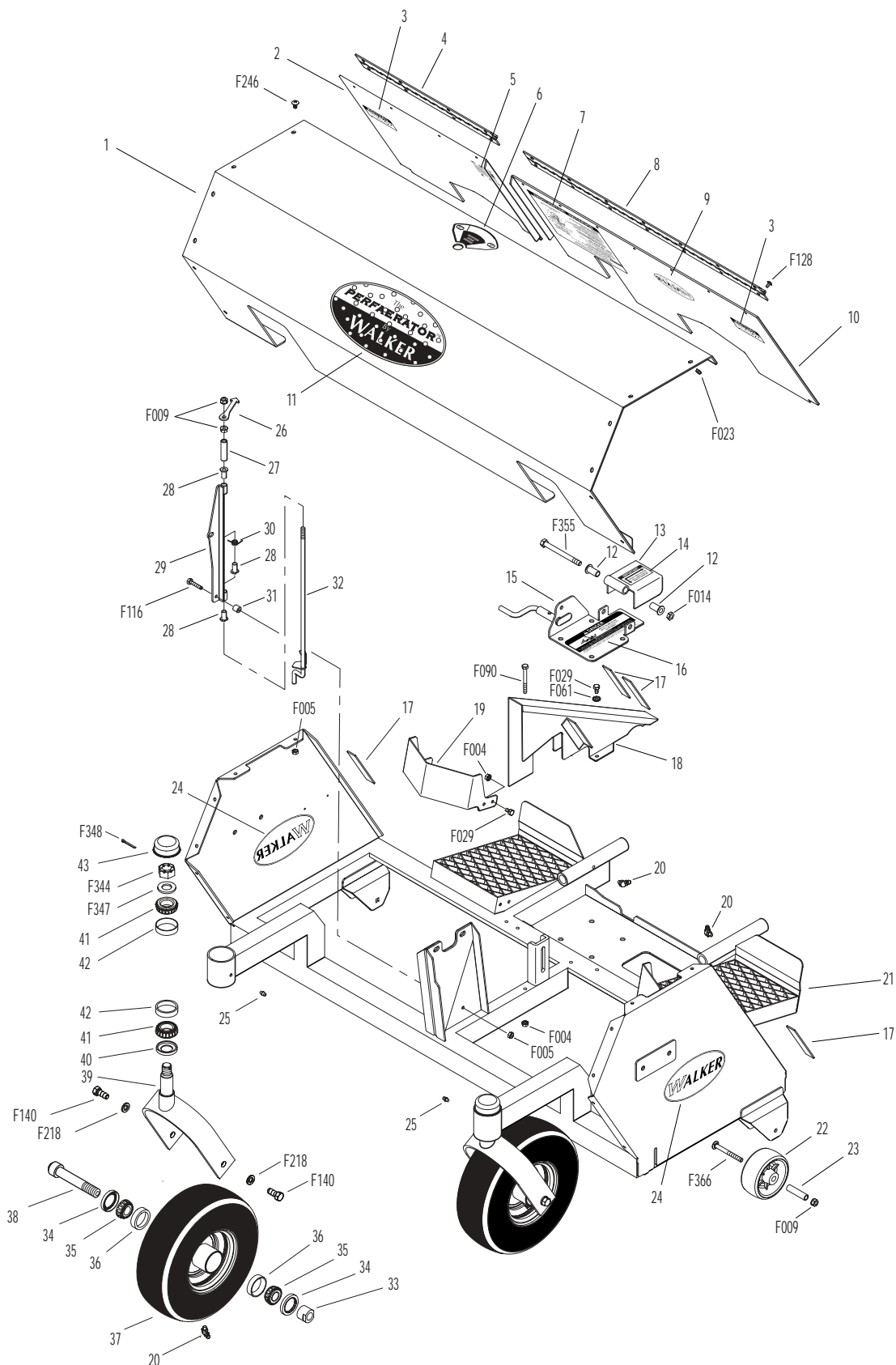
Caster Wheel Components

33	8766	Axle Nut (3/4-16)	2
34	8768-2	Seal	4
35	8037	Bearing Cone (3/4 ID)	4
36	8037-2	Bearing Race	4
37	8768	Caster Wheel, Pneu. (Includes Items # 20 & 36)	2
38	8767	Axle, Caster Wheel (5-1/8)	2
39	8765-10	Caster Wheel Fork	2
40	8769-7	Seal	2
41	8769-6	Bearing Cone (1" ID)	4
42	8769-5	Bearing Cup	4
43	8769-8	Dust Cap	2

Fasteners

F004	1/4-20 Keps Nut	11
F005	1/4-20 ESNA Nut	13
F009	5/16-18 Whiz Locknut	4
F014	3/8-16 ESNA Nut	1
F023	10-24 ESNA Nut	22
F029	1/4-20 x 1/2 Hex Bolt	10
F061	1/4 Star Lock Washer	2
F090	1/4-20 x 2-1/2 Hex Bolt	1
F116	1/4-20 x 1 Hex Bolt	1
F128	10-24 x 3/8 PTHMS	22
F140	7/16-14 x 1 Hex Bolt	4
F218	7/16 Split Lock Washer	4
F246	1/4-20 x 1/2 PTHMS	12
F344	3/4-16 Slotted Hex Nut	2
F347	3/4 SAE Washer	2
F348	1/8 x 1-1/2 Cotter Pin	2
F355	3/8-16 x 4 Hex Bolt	1
F366	5/16-18 x 3 Carriage Bolt	2

BODY AND FRAME COMPONENTS



CONTROL LINKAGE

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Control Linkage				Fasteners			
1	5850-3	Handle Grip, Foam (3-1/4)	1	F005	1/4-20 ESNA Nut		4
2	6684	Transport Lever (Includes Item # 1)	1	F007	5/16-18 Jam Nut		8
3	6684-1	Transport Lever End	1	F008	5/16-24 Keps Nut		8
4	6684-3	Release Latch	1	F009	5/16-18 Whiz Locknut		8
5	6684-4	Link, Lever Latch	1	F013	3/8-16 Whiz Locknut		6
6	7222	Extension Spring (1/4 x 3)	1	F023	10-24 ESNA Nut		2
7	5281-2	Clevis Pin (5/16 x 7/8)	2	F032	1/4-20 x 3/4 Hex Bolt		2
8	6684-5	Actuator Link	2	F038	3/8-16 x 1 Hex Bolt		4
9	5830	Grease Fitting	5	F039	3/8-16 x 1-1/4 Hex Bolt		2
10	6686-5	Actuator Cross Shaft Assembly	1	F050	1/4 SAE Washer		4
11	5214-2	Ball Joint (5/16-24) Nylon Lined	8	F054	AN960616 Washer		2
12	6686	Transport Pivot Tie Rod	4	F093	5/16-18 x 1 Hex Bolt		6
13	6685-8	Cam Alignment Plate	12	F103	10-24 x 2 PTHMS		2
14	6685-7	Grease, Almagard #3752	*	F111	1/8 x 3/4 Cotter Pin		3
15	6685-5	Machined Cam	24	F116	1/4-20 x 1-1/4 Hex Bolt		4
16	6681-8	Cam Bearing	12	F171	5/16-18 x 3/8 Set Screw		2
17	6685-4	Tine Casting	12	F231	1/4 x 3/4 Woodruff Key, #806		1
18	6685-6	Cartridge Bearing	3	F261	AN960616L Washer		2
19	6681-1	Perfaerator Tip	12	F312	3/8 x 3/8 Shoulder Bolt		2
20	6681-2	Tine Crank Shaft	1	F404	5/8-18 Jam Nut		8
21	6685-2	Tine Crank Sprocket (Includes Items # F171 & F231)	1	* Grease every eight (8) hours using Almagard #3752 lubricant (Walker P/N 6685-7).			
22	6686-6	Retractor Plate, Plastic	2				
23	6686-4	Retractor Plate Lift Bracket, RH	2				
24	6686-1	Retractor Plate Lift Bracket, LH	2				
25	6681-15	Actuator Block	1				
26	6684-2	Pivot, Transport Lever (Includes Items # 9 & 27)	1				
27	8788	Rubber Bumper (Self-Adhesive Mount)	1				

Use only genuine **Walker**[®] replacement parts.

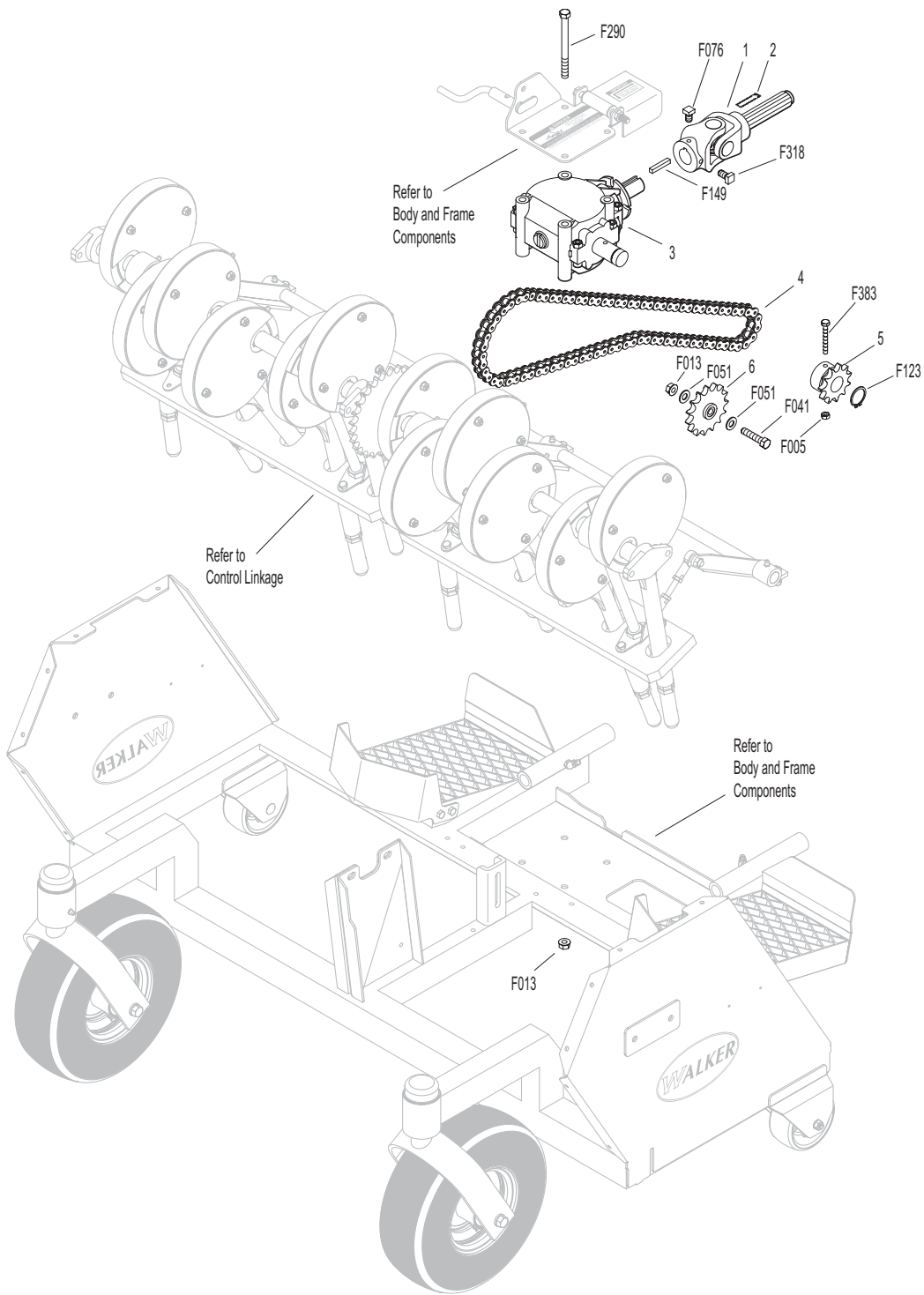
POWER TRANSMISSION COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Power Transmission Components				Fasteners			
1	6683-2	U-Joint Shaft (Includes Items # 2, F076, F149 & F318)	1	F005	1/4-20 ESNA Nut		1
2	6875	Decal, PTO Alignment Arrow	1	F013	3/8-16 Whiz Locknut		5
3	6683-6	PTO Gearbox/Shear	1	F041	3/8-16 x 1-3/4 Hex Bolt		1
4	6685	Perfaerator Chain (#50 x 88 Links)	1	F051	3/8 SAE Washer		2
5	6685-14	Gearbox Sprocket (Includes Items # F005 & F383)	1	F076	3/8-16 x 5/8 SQH Set Screw		1
6	6685-3	Idler Sprocket	1	F123	1" External Snap Ring		1
				F149	1/4 x 1/4 x 1-1/2 Key		1
				F290	3/8-16 x 5 Hex Bolt		4
				F318	3/8-16 x 3/4 SQH Set Screw		1
				F383	1/4-20 x 2 Shear Bolt Grade 2		1

Use only genuine **Walker®** replacement parts.

Effective Date 06-17-03

POWER TRANSMISSION COMPONENTS



MAINTENANCE AND SERVICE RECORD SHEET

[illegible]

LIMITED WARRANTY FOR WALKER COMMERCIAL RIDER MOWER

1. WHAT THIS WARRANTY COVERS, AND FOR HOW LONG:

Walker Manufacturing company will, at its option, repair or replace, without charge, any part covered by this warranty which is found to be defective in material and/or workmanship within one (1) year* after date of sale to the original retail purchaser unless the product is used for rental purposes, in which case this warranty is limited to ninety (90) days. At Walker's request, customer will make the defective part available for inspection by Walker and/or return the defective part to Walker, transportation charges prepaid. All parts and components of the Walker Mower are covered by this warranty **except** the following components which are warranted separately by their respective manufacturers:

Bondoli & Pavesi

Rock Solid™ (A Division of Industrial Machine Specialties, Inc.)

The available warranties covering these items are furnished with each mower. Walker does not assume any warranty obligation, liability or modification for these items, which are covered exclusively by the stated warranty of the respective manufacturers noted above.

2. WHAT THIS WARRANTY DOES NOT COVER:

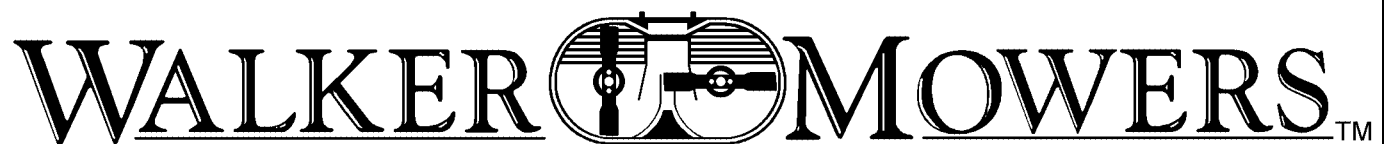
- A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the Owner's Manual for operation and maintenance.
- B. The customer shall pay any charges for making service calls and/or for transporting the mower to and from the place where the inspection and/or warranty work is performed.

3. HOW TO OBTAIN SERVICE UNDER THIS WARRANTY:

Warranty service can be arranged by contacting the dealer where you purchased the mower or by contacting Walker Manufacturing Company, 5925 East Harmony Road, Ft. Collins, CO 80528. Proof of the date of purchase may be required to verify warranty coverage.

4. WARRANTY LIMITATION:

- A. **THERE IS NO OTHER EXPRESS WARRANTY. ANY WARRANTY THAT MAY BE IMPLIED FROM THIS PURCHASE INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED TO THE DURATION OF THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- B. **WALKER WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES AND/OR EXPENSES IN CONNECTION WITH THE PURCHASE OR USE OF THE MOWER.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.
- C. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Walker, and should not be relied upon.
- D. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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